



TRW has produced what could be the world's first monolithically integrated HEMT and HBT. The photo shows a GaAs low noise device consisting of three amplifiers made from LN HEMTs (middle left, bottom left and right) and an active mixer made from a low distortion HBT (top right at centre of border).

We report on the process more fully next issue but suffice to say these can

be made on GaAs or InP substrates and utilise selective growth by MBE where the HBT is made first followed by SiN patterning, isolation implant, then HEMT growth with a final poly and nitride removal.

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ANADIGICS first quarter success

In this issue we highlight the NJ-based company, ANADIGICS - see page 22, here we take a brief look at the company's financial performance. ANADIGICS reported a net income of \$1.4 m, or \$0.18 per share for the three months ended 30 June, 1995, compared to net income of \$171 k, or \$0.03 per share for the 1994 second quarter. For the first half of 1995 net income rose to \$2.3 m, or \$0.34 per share - up from \$334 k, or \$0.06 per share, for the 1994 6-month period.

Weighted average shares outstanding for the 2nd Q95 were 7,731,000 compared to 5,801,000 for the three months ended 1 July, 1994. "The increase in the outstanding shares reflects the completion of our IPO back in April this year," he said. "Cellular IC sales included power amplifier and receiver front-end ICs for the analog AMPS cellular phones, and power amplifier ICs for the analog ETACS and digital DAMPS cellular phones. The increase in CATV IC sales was driven by increasing shipments of our new 50-860 MHz chip set for

use in new broadband CATV set top boxes".

Net sales for the 2nd Q YE95 increased 51% to \$12.5 m from \$8.3 m for the same period last year. For the first six months of 1995, net sales were \$23.4 m, a 52% increase from \$15.4 m for the first half of 1994. "The increase in sales for both the 2nd quarter and first six months of 95 was driven by demand for cellular phone ICs".

The gross profit margin for the 2nd Q YE95 and first six months increased to 53.7% and 52.2%, respectively. The gross profit margins for both periods are up significantly from last year, when it was 45.3% for the 2nd Q YE94 and 45.7% for the first six months of 94. "We are very pleased with the strong improvement in our gross margin during the first half of 95. Contributing to the increase in the gross profit margin was the company's sales volume; favourable changes in the product mix, and improvements in manufacturing yields, also contributed".

Mike Czerniak Joins Edwards' Growing Team

Mike's name will be familiar to many TFR readers through the numerous articles he has penned, spanning MOVPE in his days with Cambridge Instruments to MBE where he was European Product Manager with VG Semicon until recently.

In May this year, Mike was appointed as one of the

two Technical Support Managers in the European Semiconductor Business within Edwards High Vacuum International.

Between them, Mike and his colleague, Chris Oster-tag-Hill (ex Du Pont and Plasma Products) will cover Europe, being based in Crawley and Munich respectively.

These two newly-created positions provide technical support to the Key Account Managers in each territory, particularly on application issues, and is part of an on-going strategy to focus the company on customer applications.

Mike's first impressions were: "Having been an Edwards' customer for the past fifteen years, I am

delighted to be part of the team at last".

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